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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/666,640

09/18/2003

Alex Ning

SNX 0307

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12/14/2004

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EXAMINER

SUGARMAN, SCOTT J

ART UNIT

PAPER NUMBER

2873

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,640

Applicant(s)

NING

Examiner

Scott J. Sugarman

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-10, 14-16, 19-26 and 29-34 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 11-13, 17, 18, 27 and 28 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10-26-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5-8, 10, 14-16, 19-22, 24-26, 29-32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothe. Rothe teaches an objective lens having a focal length f_0 for receiving light from an object and for forming an image of the object on the image plane, the objective lens has a lens group (1) having an object surface (r_1) facing the object and an image surface (r_2), the lens group having at least a single lens element and a focal length $f_1 > 0$ (standardized to $f=1$), a middle lens element (2) having an object surface (r_3) and an image surface (r_4), the object surface (r_3) being a concave surface facing the lens group (1) image surface (r_2), the middle lens element image surface (r_4) being a convex surface, and a final lens element (3) having an object and an image surface (r_5 , r_6) and a positive power, the object surface (r_5) facing the middle lens (2) element image surface (r_4), the image surface (r_6) facing the image plane, the lens group (1), middle lens element (2) and final lens element (3) being shaped and coaxially positioned on an optical axis to obtain a ratio of f_1/f_0 (1.587; Emb. 1 to 1.710; Emb. 6---see Table 1) such that $0.5 < f_1/f_0 < 2.0$. The lens group (1) as shown in Fig. 1 is a single lens element with positive power. Rothe teaches a scanning

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lens and a scanning lens is inherently in a system having an electronic imager with an image plane. Rothe does not specifically teach specific lens materials or that the lens surfaces can be aspherical. The Examiner takes Official Notice that it is well known in the optical arts to use glass to make the lens elements as well as place aberration correcting aspherical surfaces on any of the lens elements. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to put an aspherical surface on any of the lenses or to make them out of glass, since glass is a well known optical material and aspherical surfaces are well known to correct aberrations in optical systems.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 9, 23 and 33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The final lens element image surface is claimed as substantially flat, but Tables 1, 2, 3 and 5 do not enable a substantially flat image surface.

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Allowable Subject Matter

Claims 3, 4, 11-13, 17, 18, 27 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or suggest a lens group (1) that is a cemented doublet or a triplet.

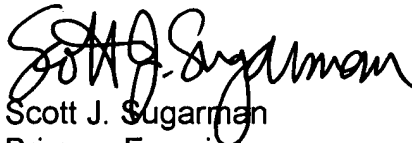
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott J. Sugarman whose telephone number is (571)272-2340.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Scott J. Sugarman
Primary Examiner
Art Unit 2873

sj
December 8, 2004